



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,284	06/25/2003	Pauli Seppinen	944-003.151-1	3300
4955	7590	07/21/2006	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			YUN, EUGENE	
		ART UNIT	PAPER NUMBER	
		2618		
DATE MAILED: 07/21/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/606,284	SEPPINEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eugene Yun	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 May 2006.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-16 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 June 2003 is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

    1. Certified copies of the priority documents have been received.

    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall (US 6,717,516) in view of Ayatsuka et al. (US 2004/0015625).

Referring to Claim 1, Bridgelall teaches a transceiver for use in an electronic device wherein said transceiver adapts itself to operate as an RF tag reader 44 (fig. 2) or as a Bluetooth transceiver 42 (fig. 2) by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Ayatsuka teaches a single antenna 25A (fig. 3) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0086]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Ayatsuka to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 2, Bridgelall also teaches said Bluetooth transceiver is useable as a transceiver for a 2.4 GHz ISM band RF tag reader system (see col. 5, lines 1-15).

Referring to Claim 3, Bridgelall also teaches an integrated circuit (see 58 in fig. 2).

Referring to Claim 4, Bridgelall also teaches a mobile terminal (fig. 1).

Referring to Claim 5, Bridgelall teaches a radio device having a radio receiver and a radio transmitter wherein operability of said device is in two modes (see col. 5, lines 1-15), a Bluetooth mode 42 (fig. 2) and an RF tag reader mode 44 (fig. 2), said radio receiver and said radio transmitter comprising a single transceiver that adapts itself to operate as a Bluetooth transceiver in said Bluetooth mode and an RF-tag reader in said RF tag reader mode by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach using a single antenna in an RF-tag reader mode or Bluetooth mode. Ayatsuka teaches using a single antenna 25A (fig. 3) in an RF-tag reader mode or Bluetooth mode (see paragraph [0086]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Ayatsuka to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 6, Bridgelall also teaches said operability of said radio device in either mode is by using said radio receiver and said radio transmitter (see col. 5, lines 1-15).

Referring to Claim 7, Bridgelall also teaches said radio device incorporated in a device having additional device functionality (see col. 5, lines 29-46).

Referring to Claim 8, Bridgelall also teaches the device in which said radio device is incorporated comprising a mobile telephone (see 24, 26, and 28 in fig. 1).

Referring to Claim 9, Bridgelall also teaches said radio device installed in a mobile telephone (see 24, 26, and 28 in fig. 1).

Referring to Claim 10, Bridgelall teaches a radio device having a radio receiver 38 and 34 (fig. 2), a radio transmitter 38 and 34 (fig. 2), and a signal processor 50 (fig. 2), wherein the radio receiver is responsive to an incoming analog radio signal for providing a down converted and modulated signal to said signal processor, wherein the radio transmitter is responsive to an output signal from said signal processor for transmission as an outgoing analog radio signal (see col. 6, lines 37-60), said device further comprising control logic for controlling said radio device in two modes, a first mode for operating as a Bluetooth device and a second mode for operating as an RF tag reader (see col. 6, lines 60-67 and col. 7, lines 1-3), wherein said radio receiver and said radio transmitter comprises a single transceiver that adapts itself to operate as an RF tag reader or as a Bluetooth transceiver by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Ayatsuka teaches a single antenna 25A (fig. 3) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0086]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of

Ayatsuka to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 11, Bridgelall teaches control logic for controlling a radio device in two modes, a first mode for operating as a Bluetooth device 42 (fig. 2) and a second mode to operating as an RF tag reader 44 (fig. 2) wherein said radio device comprises a single transceiver that adapts itself to operate as said RF tag reader or as a Bluetooth transceiver by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Ayatsuka teaches a single antenna 25A (fig. 3) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0086]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Ayatsuka to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 12, Bridgelall also teaches means for communicating with a radio access network over a radio interface (see 214 of fig. 4).

Referring to Claim 13, Bridgelall also teaches a signal processor 50 (fig. 2) and a mobile telephone transceiver 28 (fig. 1).

Referring to Claim 14, Bridgelall teaches a method comprising:

Switching a mode of a single transceiver able to operate as an RF tag reader 44 (fig. 2) in one mode and as a Bluetooth transceiver 42 (fig. 2) in another mode by

changing reception and transmission capabilities of said single transceiver (see col. 5, lines 1-15).

Bridgelall does not teach using a single antenna for said single transceiver operating as said RF tag reader or as said Bluetooth transceiver. Ayatsuka teaches using a single antenna 25A (fig. 3) for said single transceiver operating as said RF tag reader or as said Bluetooth transceiver (see paragraph [0086]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Ayatsuka to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 15, Bridgelall also teaches said single transceiver is both for interrogating an RF tag and for participating in a Bluetooth piconet (see col. 5, lines 1-15).

Referring to Claim 16, Bridgelall also teaches a single transceiver and single antenna for use in a mobile telephone 28 (fig. 1) and operating a mobile telephone transceiver of said mobile telephone over a radio interface to a radio access network (see 214 of fig. 4).

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's arguments filed 5/8/2006 have been fully considered but they are not persuasive.

Regarding the argument that the Bridgelall reference does not teach a “single transceiver”, it is believed by the examiner that the device in the Bridgelall reference is indeed a single transceiver even though the device has more than one antenna. The term “transceiver” can be very broadly read on to one skilled in the art, because many single transceivers contain rake receivers, antenna arrays, and multi-mode devices. In addition to the fact that the term “single transceiver” was not specifically defined to overcome the Bridgelall reference, the examiner still believes that the device 12 in fig. 2 of the Bridgelall reference denotes a single transceiver.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*EY*  
Eugene Yun  
Examiner  
Art Unit 2618

EY



Matthew D. Anderson  
Supervisory Patent Examiner